

REMARKS

Claims 1-5 are pending in this application. By this Amendment, claim 1 is amended. Support for the amendment to claim 1 can be found in the specification as originally filed, for example, at page 14, line 21 - page 16, line 5; page 24, line 3 - page 25, line 2; page 27, lines 3-10; and in claim 1 as originally filed. No new matter is added by the amendment.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; (c) do not present any additional claims; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

I. Claim Rejections Under 35 U.S.C. §103

A. Claims 1-4

The Office Action rejects claims 1-4 under 35 U.S.C. §103(a) over U.S. Patent No. 5,853,869 to Adachi et al., in view of U.S. Patent Application Publication No. 2001/0024685 to Boulton et al. Applicants respectfully traverse the rejection.

Independent claim 1 sets forth, in pertinent part a "transparent conductive layered structure, comprising ... a transparent two-layered film being composed of ... a transparent coat layer ... wherein the transparent coat layer comprises, as its main component, a binder matrix of silicon oxide including one or more types of alkyl groups selected from long chain alkyl groups containing 7 to 30 carbon atoms; and one or more types of alkyl groups selected from long-chain alkyl groups containing 7 to 30 carbon atoms remain in the transparent coat layer." Claims 2-4 depend from claim 1 and incorporate all of the limitations thereof.

The Office Action takes the position that all of the features of claim 1 and its dependent claims 2-4 are either taught or suggested by Adachi, in combination with Boulton. Applicants respectfully disagree.

The Office Action admits that Adachi does not disclose or suggest at least the feature that the "transparent coat layer comprises, as its main component, a binder matrix of silicon oxide including one or more types of alkyl groups selected from long chain alkyl groups containing 7 to 30 carbon atoms," as set forth in claim 1. In addition, Adachi does not disclose or suggest that "one or more types of alkyl groups selected from long-chain alkyl groups containing 7 to 30 carbon atoms remain in the transparent coat layer," as further set forth in claim 1. *See generally* Adachi. Accordingly, Adachi alone cannot support a rejection of claim 1 and its dependent claims 2-4. Boulton does not remedy the shortcomings of Adachi.

Boulton teaches a protective multi-component coating prepared by applying a silicon oxide precursor coating solution to a substrate, allowing the coating solution to dry, and firing the coating to burn off residual organic groups. *See* Boulton, paragraph [0033]. That is, the coating is heated to remove any remaining C₁-C₂₀ alkyl groups.

In contrast, claim 1 requires that the "transparent coat layer comprises, as its main component, a binder matrix of silicon oxide including one or more types of alkyl groups selected from long chain alkyl groups containing 7 to 30 carbon atoms; and one or more types of alkyl groups selected from long-chain alkyl groups containing 7 to 30 carbon atoms remain in the transparent coat layer." That is, long chain alkyl groups included in the silicon oxide binder resin are present in the transparent coat layer after drying, and thus are present in the transparent two-layer film of the claimed transparent conductive layered structure. These highly hydrophobic long chain alkyl groups are oriented on the external surface and improve

the abrasion resistance of the layer. *See* Specification, page 14, line 21 - page 15, line 15; page 24, line 7 - page 25, line 2.

Because, like Adachi, Boulton teaches baking or firing its coating composition, which removes residual organic groups, Boulton also does not disclose or suggest at least that "one or more types of alkyl groups selected from long-chain alkyl groups containing 7 to 30 carbon atoms remain in the transparent coat layer," as set forth in claim 1.

For at least these reasons, Applicants respectfully submit that claim 1 and its dependent claims 2-4 are patentable over Adachi and Boulton, individually and in combination. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Claims 1-5

The Office Action rejects claims 1-5 under 35 U.S.C. §103(a) over U.S. Patent No. 6,261,479 to Yukinobu et al., in view of U.S. Patent Application Publication No. 2001/0024685 to Boulton et al. Applicants respectfully traverse the rejection.

Claim 1 is as set forth above. Claims 2-5 are dependent from and include all of the limitations of claim 1.

The Office Action takes the position that all of the features of claim 1 and its dependent claims 2-5 are either taught or suggested by Yukinobu, in combination with Boulton. Applicants respectfully disagree.

Yukinobu discloses transparent electro-conductive structures including a transparent electro-conductive layer prepared from a silica sol, which is the product of a substantially complete dehydration condensation polymerization of alkyl silicates and which is heated after film formation to produce a hard silicate. *See* Yukinobu, col. 11, lines 34-47; col. 12, lines 24-53.

One of skill in the art would have understood that the alcohol and alkoxy groups liberated during the condensation polymerization to form the Yukinobu overcoat layer would vaporize during condensation polymerization and heating. Because the alkyl groups of Yukinobu overcoat layer would have been understood to vaporize and thus would not be present in the overcoat layer, Yukinobu does not disclose or suggest at least the feature that "one or more types of alkyl groups selected from long-chain alkyl groups containing 7 to 30 carbon atoms remain in the transparent coat layer," as set forth in claim 1.

Accordingly, Yukinobu alone cannot support a rejection of claim 1 and its dependent claims 2-5. Boulton does not remedy the shortcomings of Yukinobu.

As discussed above, Boulton also does not disclose or suggest at least the feature that "one or more types of alkyl groups selected from long-chain alkyl groups containing 7 to 30 carbon atoms remain in the transparent coat layer," as set forth in claim 1.

For at least these reasons, Applicants respectfully submit that claim 1 and its dependent claims 2-5 are patentable over Yukinobu and Boulton, individually and in combination. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-5 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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